IEEE802.3 10Mbps Ethernet TP-Fiber Converter (Fdx/Hdx) User's Manual

(620-0041-000)

1. Overview

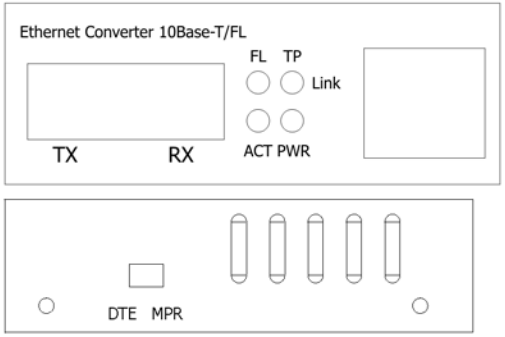
IEEE 802.3 10Mbps Ethernet supports various type media for network connection such as 10Base-T and 10Base-FL. The converter can be used as a standalone unit or as a slide-in module to the 19" converter rack (up to 10 units) for use at a central wiring closet.

2. Checklist

Before you start installing the Converter, verify that the package contains the following:

- The Converter
- AC-DC Power Adapter
- This User's Manual

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.



3. LED Description

LED	Color	Function
FL Link	Green	Lit when Fiber connection is good
FL Act	Green	Blink when any FL traffic is present
TP Link	Green	Lit when TP cable connection is good Blink when any FL traffic is present
Power	Green	Lit when +5V power is coming up

4. Installing the Converter

For as a standalone unit:

⇒ Verify the AC-DC adapter conforms to your country AC power requirement and insert the power plug

⇒ Connect the media cable for network connection

For as a slide-in unit:

⇒ The slide-in Media Converter and Converter Rack should be supplied only from the same source, both Media Converter and Rack are built to match each other at dimensions, DC jack, DC receptacle and power safety

⇒ Turn off the 19" converter rack power

⇒ Ensure that there is no activity in the network

⇒ Locate +5V DC power jack on converter back, carefully slide in and plug to 19" rack +5V DC power receptacle

⇒ Connect the media cable for network connection

⇒ Turn on the converter rack power, the Power LED will light up

Fiber Port	Attach the fiber cable. The Tx, Rx fiber cable must be paired at both ends.
TP Port	Attach TP Cat. 3 or Cat. 5 cable to TP port

Note:

a. Use the straight-through cable. Cable pin-outs for RJ-45 jack is 1, 2, 3, 6 to 1, 2, 3, 6

b. MPR (Default) : To a Switch or Hub
DTE : To a workstation or Network Interface Card (NIC)
(DTE pin-outs is crossover on board already)
Configure the MPR-DTE slide switch on the side panel for cable connection to hub or Network Interface Card (NIC)

c. Be sure the proper wiring and the Link LED status

5. Connecting to 10/100Mbps N-Way Device

This TP-Fiber Converter does not support N-Way 10/100 Auto-Negotiation protocol. It must force the remote N-Way 10/100 partner to 10Mbps speed. Make sure that TP Link LED is ON when the remote N-Way device is connected.

6. Technical Specifications

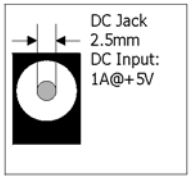
- **Standards:** IEEE 802.3 10Base-T/10Base-FL
- **TP Port:** RJ-45 jack with a slide switch for "MPR" or "DTE" selection
- **Fiber Port:**

The 10Mbps Fiber Transceivers:		
CEM2000	Multi-Mode Duplex-SC	850nm wavelength
CEM2800	Single-Mode Duplex-ST	1310nm wavelength

- **TP Cable:** Category 3, 4, or 5 Unshielded-Twisted Pair (UTP) cable, up to 100m
- **Fiber Cable:**
  50/125, 62.5/125, or 100/140µm multi-mode, up to 2km
  8.3/125, 8.7/125, 9/125, or 10/125µm single-mode, up to 8km
- **Data Transfer Rate:** 10Mbps at half-duplex, 20Mbps at full-duplex
- **LED Indicators:** POWER, FL Link, FL Activity, TP Link/Activity
- **Power Requirement:** 1A@+5V DC
- **Ambient Temperature:** 0° to 50° C
- **Humidity:** 5% to 90%
- **Dimensions:** 26.2 x 70.3 x 94 mm (H x W x D)
- **Complies with FCC Part 15 Class A and CE Mark**

7. DC Jack and AC-DC Power Adapter

The DC jack's central post is 2.5mm wide; it conforms to the DC receptacle (2.5mm) on the 19-inch Converter Rack slot.



Keep the AC-DC adapter as spare parts when Media Converter is installed in a 19-inch Media Converter Rack.